IN THE UNITED STATES DISTRICT COURT

FOR THE NORTHERN DISTRICT OF CALIFORNIA

KARL STORZ ENDOSCOPY-AMERICA, INC.,

Plaintiff,

v.

STRYKER CORPORATION and STRYKER COMMUNICATIONS, INC.,

Defendants.
_____/

No. C 09-00355 WHA

ORDER DENYING MOTION FOR SUMMARY JUDGMENT OF NON-INFRINGEMENT AND INVALIDITY AND VACATING HEARING

INTRODUCTION

In this patent-infringement dispute involving inventions relating to the coordination of surgical instruments during surgery, defendants move for summary judgment of non-infringement and invalidity. For the reasons stated below, defendants' motion is **DENIED**, and the hearing on December 8 is **VACATED**.

STATEMENT

Plaintiff Karl Storz Endoscopy-America, Inc. (KSEA) commenced this action against defendants Stryker Corporation and Stryker Communications (Stryker) for infringement of United States Patent Nos. 5,788,688 and 6,397,286. Both parties were businesses engaged in the development, sale, and support of integrated operating rooms. The patents were directed towards the coordination of surgical instruments during minimally invasive surgery.

Minimally invasive surgery required a large number of electronic surgical instruments. This in turn resulted in tangled cords and a conglomeration of equipment to be both monitored and controlled during the course of an operation. As more and more instruments were relied on in surgical procedures, operating rooms became more and more cluttered with equipment, and the control heads had to be placed further away from the patient and surgeon. This scattering of

equipment required division of the surgeon's attention, and it also limited the surgeon's control over the equipment. The surgeon's inability to directly monitor and control the surgical equipment posed safety risks. The inventions disclosed in the patents-at-issue were designed to assuage the safety risks of coordinating multiple surgical instruments during surgery.

Stryker sold electronic medical devices under the name SIDNE that were used to provide centralized control of various other electronic medical devices in the operating room (Mahadik Decl. ¶¶ 4–6). Devices attached to SIDNE's serial ports and centrally controlled by SIDNE included, for example, endoscopic cameras and light sources, insufflators, arthroscopy pumps, and surgical tables (*id.* at ¶ 7). SIDNE devices allowed a user to use either voice commands or a touch screen tablet to control the attached devices (*id.* at ¶ 8). Certain models of another Stryker product, SwitchPoint, connected to SIDNE and allowed a user to control SIDNE (and devices connected to it) through a SwitchPoint touch panel display (*id.* at ¶ 9; Beutter Decl. ¶ 5). A picture of a SwitchPoint system is reproduced below:

KSEA filed this action in the Western District of Tennessee four years ago. The action was transferred to this district in January 2009. A claim construction order issued in May 2011 (Dkt. No. 293). In October 2011, Stryker filed its motion for summary judgment of

non-infringement of the '688 and '286 patents, and invalidity of the '286 patent (Dkt. No. 309). This order follows full briefing.

ANALYSIS

1. LEGAL STANDARD.

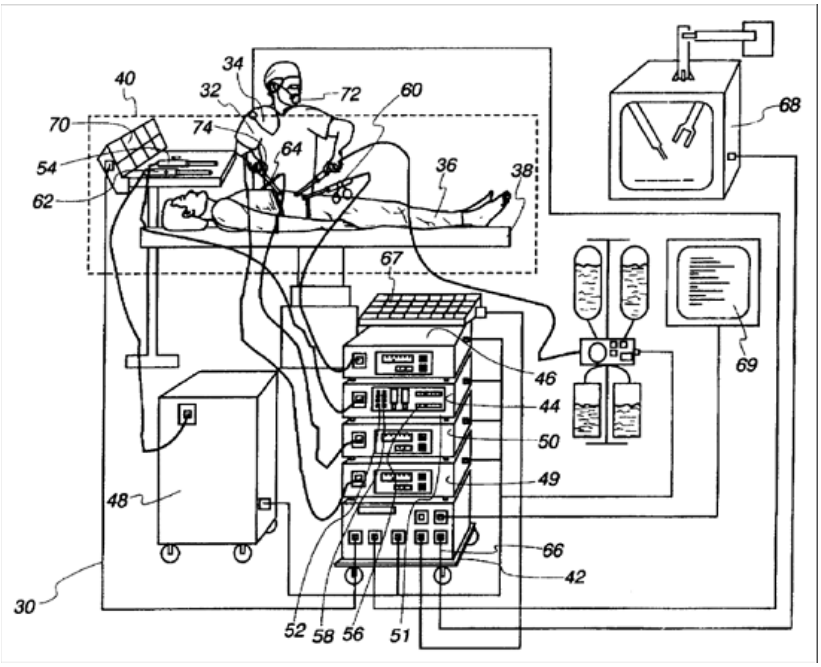
Summary judgment is proper when the "pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." FRCP 56(c). An issue is "genuine" only if there is sufficient evidence for a reasonable fact-finder to find for the non-moving party, and "material" only if the fact may affect the outcome of the case. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248–49 (1986). All reasonable inferences, however, must be drawn in the light most favorable to the non-moving party. *Olsen v. Idaho State Bd. of Med.*, 363 F.3d 916, 922 (9th Cir. 2004).

These standards apply equally to summary judgment motions involving patent infringement claims. *See Union Carbide Corp. v. American Can Co.*, 724 F.2d 1567, 1571 (Fed. Cir. 1984). To survive a motion for summary judgment of non-infringement, a patentee must set forth competent evidence that "features of the accused product would support a finding of infringement under the claim construction adopted by the court, with all reasonable inferences drawn in favor of the non-movant." *Intellectual Science and Technology, Inc. v. Sony Electronics, Inc.*, 589 F.3d 1179, 1183 (Fed. Cir. 2009) (citations omitted). If expert testimony is provided by the patentee in an attempt to defeat summary judgment, the testimony proffered must be supported by sufficient facts and be reasonable in light of the undisputed factual record. *See Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 242 (1993).

2. THE '688 PATENT.

The '688 Patent, entitled "Surgeon's Command and Control," disclosed an invention that consolidated the functions of various instruments' control heads into one device. The patent was issued on August 4, 1998. Twenty claims from the '688 patent are asserted in this litigation: independent claims 1 and 10, and dependent claims 2–9 and 11–20.

This is a diagram from the '688 patent illustrating the use of a surgical command and control system:



Independent claims 1 and 10 are reproduced below. Claim 1 covered the following apparatus (cols. 19:39–20:10):

> 1. In an endoscopic operating environment defining a surgeon's operating station at which a surgical procedure is performed with a plurality of self-contained independently and simultaneously operable pieces of surgical equipment, each including a surgical control head located at a non-sterile area remote from the surgeon's operating station and associated devices developing an output in response to commands manually entered directly at the surgical control head for driving an associated surgical instrument located at the surgeons [sic] operating station, a surgeon's command and control system comprising:
>
> a. a surgeon's control panel operatively positioned at the surgeon's operating station, the surgeon's control panel including display means for displaying data relating to status of each of the plurality of self-contained pieces of surgical equipment and input means for receiving commands entered manually;
>
> b. a plurality of communication interface circuits, one for each of said plurality of self-contained pieces of surgical equipment, each for transmitting data representing status of the associated surgical control head and for receiving remote commands for driving the associated self-contained surgical instrument; and
>
> c. a central controller operatively connected to each said communication interface circuit and said surgeon's control panel, said central controller transmitting to said plurality of self-contained pieces of surgical equipment commands entered manually on the surgeon's control panel and transmitting to said surgeon's control panel status of the surgical control heads for display on said display means to provide a surgeon direct command and control of the plurality of

self-contained pieces of surgical equipment located in the non-sterile area remote from the surgeon's operating station,

d. whereby each of the plurality of self-contained pieces of surgical equipment can be simultaneously operated with the operation thereof controlled and monitored from the surgeon's operating station.

Claims 10 covered a similar apparatus (cols. 20:47–21:19):

1. A surgical control system, comprising:
a. a surgeon's operating station at which a surgical procedure is performed;

b. first and second self-contained and simultaneously operable pieces of surgical equipment each for performing a surgical procedure and including a surgical control head located at an area remote from the surgeon's operating station and associated devices developing a variable output for driving an associated surgical instrument located at the surgeons [sic] operating station, each self-contained piece of surgical equipment including means for producing a signal indicative of the output to each surgical instrument and means for receiving a variable control signal, the output varying in response to variations of the control signal;

c. first and second communication interface circuits for transmitting data representing status of the surgical control heads and for receiving remote commands for driving each of the self-contained surgical instruments;

d. a surgeon's control panel operatively positioned at the surgeon's operating station, the control panel including a display means for displaying data relating to the output to each of the surgical instruments and input means for receiving commands entered manually;

e. a central controller operatively connected to said communication interface circuits and said surgeon's control panel, said central controller developing and transmitting to each said self-contained piece of surgical equipment the variable control signal from commands entered manually on the surgeon's control panel and transmitting to said surgeon's control panel data relating to the output of each of the surgical instruments for display on said display means to provide a surgeon direct command and control of the self-contained pieces of surgical equipment located in the non-sterile area remote from the surgeon's operating station,

f. whereby each of the plurality of self-contained pieces of surgical equipment can be simultaneously operated with the operation thereof controlled and monitored from the surgeon's operating station.

Both independent claims, and therefore all dependent claims, included the following limitations: "a surgeon's control panel operatively positioned at the surgeon's operating station" and "a surgeon's operating station at which a surgical procedure is performed." The claim construction order construed "a surgeon's control panel operatively positioned at the surgeon's operating station" to mean: "a panel that a surgeon can use directly both to view data and to enter commands manually without leaving the surgeon's operating station" (Dkt. No. 293 at 17). The

order construed "a surgeon's operating station at which a surgical procedure is performed" to mean "the location a surgeon occupies while using surgical instruments to perform a surgical procedure on a patient" (*id.* at 14). Putting these two phrases together, the claims required "a panel that a surgeon can use directly both to view data and to enter commands manually without leaving the location a surgeon occupies while using surgical instruments to perform a procedure on a patient."

A. Stryker's Arguments.

While there is no disagreement over whether the Stryker products, SIDNE and SwitchPoint, allowed for a user to both view data and enter commands manually at a single location (*see* Mahadik Decl. ¶¶ 9, 13; Marucci Dep. 33:22-34:16), there is a factual dispute over whether the accused products were used within the surgeon's operating station.

Stryker argues that KSEA has provided no evidence that any surgeon used a Stryker product "directly both to view data and to enter commands manually" while the device was located at "the surgeon's operating station" (Br. 4). Stryker also argues that the accused products could not have been located at the surgeon's operating station because they could not have been sterilized.

B. Circumstantial Evidence of Direct Infringement.

In the patent context, although the comparison of the claims to the accused system is a fact question, summary judgment may be granted if no reasonable jury could find infringement. *See Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 39 n. 8 (1997). Literal infringement occurs when each limitation found in a properly construed claim literally reads on the accused product. *Geo. M. Martin Co. v. Alliance Machine Systems Int'l, LLC*, 560 F. Supp. 2d 893, 899 (ND Cal. 2008) (Alsup, J.).

A patentee may rely on either direct or circumstantial evidence to prove direct infringement. *Lucent Technologies, Inc. v. Gateway, Inc.*, 543 F.3d 710, 723 (Fed. Cir. 2008). "To infringe a claim that recites capability and not actual operation, an accused device need only be capable of operating in the described mode. Thus, depending on the claims, an accused device may be found to infringe if it is reasonably capable of satisfying the claim limitations, even

though it may also be capable of noninfringing modes of operation." *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1204 (Fed. Cir. 2010) (quotation marks and citations omitted).

Contrary to Stryker's argument, KSEA does not need direct evidence that a surgeon has in fact used the accused products while the panel was in the surgeon's operating station, at least to prove liability. Circumstantial evidence is sufficient if reasonable inferences can be drawn by the fact-finder. Nor does KSEA have to prove that the accused products were *always* used in the surgeon's operating station. To prove infringement, KSEA needs to prove that the accused products were reasonably capable of being used in the surgeon's operating station. This is because the '688 patent has device claims drawn to capability. As construed by the claim construction order, the invention required "a panel that a surgeon *can* use directly both to view data and to enter commands manually without leaving the surgeon's operating station" (Dkt. No. 293 at 17)(emphasis added). This is capability language, and evidence showing that the accused products were reasonably capable of functioning in an infringing manner can be sufficient for infringement.

Stryker cites *Typhoon Touch Technologies, Inc. v. Dell, Inc.*, 659 F.3d 1376 (Fed. Cir. 2011), for the proposition that "KSEA must show that the 'surgeon's control panel' is actually located (not merely that it theoretically might be located)" at the operating location (Reply Br. 4–5). But *Typhoon* did not hold that capability was insufficient as a matter of law for apparatus claims and that there must have been direct evidence of actual infringement. In *Typhoon*, the district court construed the claim language "a memory for [the recited functionality]" to mean "a memory that *must* perform the recited function." *Typhoon*, 659 F.3d at 1380 (emphasis added). After construction, the claim required that a device, to be covered by the claim, actually performed, or was configured or programmed to perform, each of the functions stated in the claim. *Ibid.* Patentee argued that the district court incorrectly included a "use" limitation in an apparatus claim by requiring that the memory storing function "must" be performed. *Ibid.* The Federal Circuit disagreed and held that the district court did not err. *Typhoon* is distinguishable from the instant action. *First*, the '688 patent was construed to have a panel that "can" be used at the operating station, not that it must be used there. *Second*, as

discussed in the next section, there are sufficient facts to suggest that the accused products were used in the operating station without modification or re-configuration.

C. Genuine Issue of Material Fact as to Whether the Accused Products Were Used in the Surgeon's Operating System.

(1) Marketing Materials and Re-gloving.

KSEA presents sufficient facts to draw a reasonable inference that SIDNE devices were used in an infringing manner. KSEA relies on a number of Stryker's marketing materials that state that the SIDNE devices can operate from "anywhere in the operating room" (Opp. 6–8; *see, e.g.*, Lehberger Decl., Exh. D at S041479). KSEA also relies on witness declarations that surgeons have and will sometimes manually operate an unsterilized display panel within the operating station by using the "re-gloving" technique. The re-gloving technique involves surgeons breaking and then restoring sterile protocol to control unsterile equipment in the operating station (Opp. 9). Surgeons have and will wear multiple surgical gloves in order to touch a non-sterile device and then remove the outermost glove to restore sterile protocol (Gunday Decl. ¶ 12). Alternatively, surgeons would touch a non-sterile device and then re-glove to restore sterile protocol (*ibid.*). Testimony regarding the re-gloving technique would be supplied by KSEA's infringement expert, Mr. Erhan Gunday, who has personally witnessed surgeons breaking and then restoring sterile protocol in this manner. Moreover, Stryker's own FRCP 30(b)(6) witness, its marketing director Chad Evans, acknowledged that such practices do occur (although not specifically on the SIDNE devices). Evans Dep. Tr. at 128:6–16. Stryker's marketing materials and the testimony regarding re-gloving practices is sufficient evidence for a reasonable fact-finder to find that the accused products were used in the operating station.

In response, Stryker argues that this re-gloving procedure "makes no sense from a practical perspective, and KSEA has not presented any evidence that it happened with the accused products" (Reply Br. 3). Stryker cites no evidence for its impracticality argument. Stryker's response raises a genuine dispute of material fact as to whether surgeons operated the SIDNE devices in this manner. Summary judgment of non-infringement is inappropriate for the '688 patent.

(2) Procedures Other Than Re-gloving.

Since this order has already determined that there is a genuine dispute of material fact as to whether re-gloving occurred during use of the SIDNE devices in the operation station, there is no need to discuss KSEA's other theories — such as sterile bagging — of how SIDNE was used in the operating station.

D. Doctrine of Equivalents.

Since this order has already determined that there is a genuine dispute of material fact as to whether the accused products literally infringed the '688 patent, there is no need to analyze infringement under the doctrine of equivalents.

2. Infringement of the '286 Patent.

The '286 patent, entitled "Arrangement for Central Monitoring and/or Control of at Least One Apparatus," provided a computer science solution to implementing a system like the one disclosed in the '688 patent. The invention improved the ability to control and monitor a large number of (different or identical) surgical units. One improvement was the ability to replace failed units and connect new units during an ongoing operation without any connection problems or interference with the other units. The '286 patent was issued on May 28, 2002. Twenty-seven claims from the '286 patent are asserted in this litigation: independent claim 1, and the rest dependent claims.

Independent claim 1 covered (col. 7:8–20):

> 1. System for centrally controlling a plurality of instruments for endoscopy characterized by:
>
> a. a self-configuring bus and a bus master and a plurality of interfaces interconnecting the instruments to the self-configuring bus;
>
> b. the instruments being operatively connected via interfaces on the self-configuring bus to said bus master;
>
> c. the bus master monitoring communication on the bus for correct execution;
>
> d. the bus master configuring the bus automatically whenever a said instrument is either newly connected or is disconnected from said bus without interruption of the operation of the system.

Stryker argues that the accused products did not infringe because they did not contain "a self-configuring bus" or "a bus master that monitors communications on the bus for correct execution" (Br. 4).

A. Self-configuring Bus.

The claim construction order construed the term "a self-configuring bus" to mean "a communication medium for connecting multiple devices that automatically configures itself" (Dkt. No. 293 at 28). The order construed this term broadly because "the most that can be inferred from the phrase 'self-configuring bus' is that the bus configures itself . . . *some way*, such that external configuration which otherwise would be necessary is not required" (Dkt. No. 27) (emphasis added).

KSEA contends that the accused products infringe because they have buses that are plug-and-play capable. Stryker does not dispute that the accused products are plug-and-play capable. The dispute between the parties is whether the "self-configuring bus" limitation is satisfied by buses that are plug-and-play capable.

KSEA's technical expert, Erhan Gunday, opined that "self-configuring bus" would have been understood by a person with ordinary skill in the art to include plug-and-play capable buses (Gunday Decl. ¶ 32–42). In support, Mr. Gunday cited an April 1997 article titled "The Facts About Firewire" which described firewire as a "self-configuring serial bus" because it "configures itself" whereby "each time a node is added to or removed from the network, the bus's topology is automatically reconfigured by the bus protocol" (Lehberger Decl., Exh. R at KSEA314228, KSEA314231). Thus, KSEA argues that a plug-and-play bus satisfies the "self-configuring bus" limitation because the topology is automatically reconfigured by the bus protocol when a node is added or removed on a plug-and-play bus.

Stryker does not deny that SIDNE systems are plug-and-play capable. Instead, Stryker argues that the "self-configuring bus" limitation, as construed by the claim construction order, cannot be satisfied by a bus that is merely plug-and-play capable (Reply Br. 9–10). Stryker argues that a "self-configuring bus" must be limited to a bus that can change its own "communication architecture" after the manufacturing process (*see* Reply Br. 10). And since the

accused products' "communication architecture is fixed after the manufacturing process," they do not satisfy the claims' limitation (Br. 15). This order disagrees. Stryker improperly seeks to add a new limitation to the term "self-configuring bus." Stryker has not cited any support in the record or extrinsic evidence that a "self-configuring bus" should be limited to buses that can change its own communication architecture after the manufacturing process. Notably, the claim construction order denied Stryker's earlier attempt to construe "self-configuring bus" because Stryker failed to "provide [the] necessary foundation for construing the term" (Dkt. No. 293 at 27). Stryker fails to do so again.

This order finds that KSEA raises sufficient evidence for a reasonable fact-finder to find that the accused products contain a self-configuring bus.

Stryker also argues that KSEA is required to, but has not, identified any physical elements in the accused products that satisfies the "self-configuring" adjective of the limitation, "self-configuring bus." Put another way, Stryker is arguing that it is insufficient as a matter of law that the only infringing structure identified by KSEA in the SIDNE systems is a "bus" and not a "self-configuring bus" (Reply Br. 10). Stryker cites *Intellectual Science and Tech., Inc. v. Sony Elecs., Inc.*, 589 F.3d 1179, 1185 (Fed. Cir. 2009) for this requirement.

Stryker overstates the holding of *Intellectual Science*. *Intellectual Science* did not stand for the proposition that each adjective in a claim necessitates the identification of a separate physical element in the accused product. In *Intellectual Science*, the parties agreed that the means-plus-function limitation of "data transmitting means" should be construed to require a structure that included at least a system control bus, an ITDM, a host interface bus, and ROM/RAM. 589 F.3d at 1181–82. In that context, the Federal Circuit held that a means-plus-function claim term only literally covered an accused device if the relevant structure in the accused device is identical or equivalent to each corresponding structure in the specification. *Id.* at 1185. *Intellectual Science* is distinguishable from this instant action. The claims at issue in the '286 patent are not means-plus-function claims. And unlike the parties in *Intellectual Science*, Stryker has not pointed to a physical element that would be needed to show a self-configuring bus.

B. Monitoring Communication on the Bus for Correct Execution.

Stryker argues that because the accused products did not confirm that commands on the bus were correctly executed, they did not meet the limitation: "monitors communication on the bus for correct execution" (Br. 5). Specifically, Stryker argues that SIDNE cannot meet the limitation because it was a "fire and forget" system: SIDNE sent commands to connected devices, and it was able to confirm that a complete command was received by a connected device (Mahadik Decl. ¶ 13). SIDNE could not, however, confirm if a connected device executed a command (*ibid.*). SIDNE did continue to poll each port to see if the connected devices sent any change in status, and did report each change in status from a connected device to the user (*ibid.*). For example, if a particular command was not executed, then the connected device did not send a change in status (*ibid.*). KSEA does not dispute that SIDNE operated in this manner. Instead, KSEA argues that this satisfies the limitation of "monitoring communication on the bus for correct execution" (Opp. 15).

The dispute between the parties is whether the limitation requires the accused products to monitor the connected devices for correct execution of the command or to monitor for the correct execution of the communication itself. Neither party offers extrinsic evidence or cites to the record for support of their interpretation. This phrase was not addressed in the claim construction order. Given that claim construction is not a purely legal matter, but is (as the Supreme Court describes it) a "mongrel practice" with "evidentiary underpinnings," it is entirely appropriate for this order to deny summary judgment and withhold construing the claim until the record has been developed more at trial. After the record is supplemented with expert testimony at trial, it may become clearer whether a person of ordinary skill in the art would have understood the phrase to mean correct execution of a command by an attached device or correct execution of a communication to an attached device.

C. Doctrine of Equivalents.

Since this order has already determined that there is a genuine dispute of material fact as to whether the accused products literally infringed the '286 patent, there is no need to analyze infringement under the doctrine of equivalents.

3. THERE IS A GENUINE DISPUTE OF MATERIAL FACT AS TO WHETHER THE '286 PATENT MEETS THE WRITTEN DESCRIPTION REQUIREMENT.

Stryker argues that the '286 patent disclosed only a self-configuring bus that automatically selects a bus master; but that the claims — and specifically, the "self-configuring bus" language in those claims — were broader and not adequate described in the specifications (Br. 20). Stryker relies, in part, on the claim construction order, which declined to limit the scope of the claims to a self-configuring bus that automatically selects a bus master (Dkt. No. 293 at 25–28).

"The [written description] test requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art. Based on that inquiry, the specification must describe an invention understandable to that skilled artisan and show that the inventor actually invented the invention claimed. This inquiry . . . is a question of fact" *Ariad Pharmaceuticals, Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010). "Examples are not necessary to support the adequacy of a written description." *Falko-Gunter Falkner v. Inglis*, 448 F. 3d 1357, 1366 (Fed. Cir. 2006). "Invalidating a claim requires a showing by clear and convincing evidence that the written description requirement has not been satisfied." *Invitrogen Corp. v. Clontech Laboratories, Inc.*, 429 F.3d 1052, 1073 (Fed. Cir. 2005).

Stryker does not meet its high burden to show a deficiency in the written description. Stryker's only factual basis is that the specifications do not list different iterations of self-configuring buses other than one that automatically selects a bus master. That is insufficient to prove by clear and convincing evidence that the specifications do not show that the inventor actually invented the invention claimed from the perspective of a person of ordinary skill in the art. Stryker has not submitted any declarations by a person of ordinary skill in the art regarding whether the specifications adequately describes the invention. Moreover, Stryker has not overcome KSEA's factually supported assertion that "self-configuring bus" could have been understood by person with ordinary skill in the art to mean a plug-and-play capable bus. At most, Stryker has raised a factual dispute as to whether a person of ordinary skill in the art would have understood the specifications to adequately describe the claims.

4. THERE IS A GENUINE DISPUTE OF MATERIAL FACT AS TO WHETHER THE '286 PATENT SATISFIES THE DEFINITENESS REQUIREMENT.

Stryker argues that the term "self-configuring" is indefinite (Br. 17). A claim satisfies the definiteness requirement of 35 U.S.C. 112 "if one skilled in the art would understand the bounds of the claim when read in light of the specification. A claim will be found indefinite only if it is insolubly ambiguous, and no narrowing construction can properly be adopted . . . . On the other hand, if the meaning of the claim is discernible, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, . . . the claim [is] sufficiently clear to avoid invalidity on indefiniteness grounds." *Praxair, Inc. v. ATMI, Inc.*, 543 F.3d 1306, 1319 (Fed. Cir. 2008) (citations omitted).

As discussed in previous sections of this order, KSEA cites factual support for its assertion that a person with ordinary skill in the art could have understood "self-configuring bus" to mean a bus with plug-and-play capabilities. This raises a genuine dispute of material fact and precludes summary judgment on the definiteness requirement.

CONCLUSION

For the foregoing reasons, defendants' motion for summary judgment of non-infringement and invalidity is **DENIED**. The hearing set for December 8, 2011 is **VACATED**. The jury trial date will stand at February 13, 2012.

IT IS SO ORDERED.

Dated: November 29, 2011.

WILLIAM ALSUP
UNITED STATES DISTRICT JUDGE